Abstract

A bead dispensing system is provided for delivering small amounts of substances onto substrates. The system can include, for example, a movable support structure having an array of spaced-apart projections depending from its lower side. An attraction source, such as a vacuum, magnetic, and/or electrostatic force, is operable at each projection end region to attract and retain one bead. The projection array can be aligned with an array of bead-receiving regions of a substrate, e.g., an array of spaced-apart wells of a micro-plate or card. In one embodiment, a plurality of reagent-carrying beads are picked up, retained at respective projection end regions, and moved to a location over a multi-well plate. The beads are then released in a fashion permitting each bead to land in a respective well. The system of the invention is particularly useful for fabricating arrays of reagents.